

**IN THE CLAIMS:**

Please amend the claims as follows:

1-23. (Cancelled)

24. (Previously Presented): A method of forming a metal layer on a substrate, comprising:

positioning a substrate in an electroplating cell having a porous pad and an electrolyte solution therein;

contacting at least a portion of the substrate to the porous pad;

forming a metal layer on the substrate by biasing the substrate relative to an electrode at a first electrical bias and then biasing the substrate relative to the electrode at a second electrical bias, wherein the first electrical bias deposits metal on the substrate and the second electrical bias removes metal from the substrate; and

varying the magnitude of the second electrical bias relative to the first electrical bias as the metal layer is formed.

25. (Cancelled)

26. (New) The method of claim 24, wherein the second electrical bias removes metal from the contacted portions of the substrate.

27. (New) The method of claim 24, wherein the substrate and the porous pad move relative to one another during metal layer formation.

28. (New) The method of claim 24, wherein the metal layer comprises copper (Cu), tungsten (W), nickel (Ni), aluminum (Al), gold (Au), silver (Ag), or combinations thereof.

29. (New) The method of claim 24, wherein the porous pad contacts portions of the substrate with a pressure in a range of about 0.1 psi and about 5 psi.

30. (New) The method of claim 24, wherein the electrolyte solution comprises one or more materials selected from the group consisting of water, pH adjusting agents, and metallic species.

31. (New) The method of claim 24, wherein the first electrical bias has an opposite polarity from that of the second electrical bias.

32. (New) The method of claim 24, wherein the first electrical bias and the second electrical bias are alternately applied to the substrate relative to the electrode within a range of about - 5 volts to about 5 volts.

33. (New) The method of claim 24, wherein the first electrical bias and the second electrical bias are alternately applied to the electrode for differing time periods.

34. (New) The method of claim 24, wherein the first electrical bias applied relative to the electrode is within a range of about 0 volts to about +5 volts and the second electrical bias applied relative to the electrode is within a range of about 0 volts to about -5 volts are alternately applied.